

Department of Defense DIRECTIVE

NUMBER 5000.1 May 12, 2003

USD(AT&L)

SUBJECT: The Defense Acquisition System

References:

- (a) DoD Directive 5000.1, "The Defense Acquisition System," October 23, 2000 (hereby canceled)
- (b) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," May 12, 2003
- (c) DoD 5025.1-M, "DoD Directives System Procedures," current edition
- (d) Title 10, United States Code, "Armed Forces"
- (e) Section 2350a of title 10, United States Code, "Cooperative Research and Development Projects: Allied Countries"
- (f) Section 2751 of title 22, United States Code, "Need for international defense cooperation and military export controls; Presidential waiver; report to Congress; arms sales policy"
- (g) Section 2531 of title 10, United States Code, "Defense memoranda of understanding and related agreements"
- (h) Federal Acquisition Regulation (FAR), current edition
- (i) Section 1004, Public Law 107-314, "Bob Stump National Defense Authorization Act for Fiscal Year 2003," "Development and Implementation of Financial Management Enterprise Architecture"
- (j) DoD Directive 8500.1, "Information Assurance (IA)," October 24, 2002
- (k) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," January 11, 2002
- (l) DoD Directive 2060.1, "Implementation of, and Compliance with, Arms Control Agreements," January 9, 2001

1. PURPOSE

This Directive:

- 1.1. Reissues reference (a) and authorizes publication of reference (b).
- 1.2. Along with reference (b), provides management principles and mandatory policies and procedures for managing all acquisition programs.

2. APPLICABILITY AND SCOPE

- 2.1. This Directive applies to the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all organizational entities within the Department of Defense (hereafter collectively referred to as "the DoD Components").
 - 2.2. The policies in this Directive apply to all acquisition programs.

3. DEFINITIONS

- 3.1. The <u>Defense Acquisition System</u> is the management process by which the Department of Defense provides effective, affordable, and timely systems to the users.
- 3.2. An <u>Acquisition Program</u> is a directed, funded effort that provides a new, improved, or continuing materiel, weapon or information system or service capability in response to an approved need.
- 3.3. The <u>Defense Acquisition Executive</u> (DAE) is the USD(AT&L) who has responsibility for supervising the Defense Acquisition System. The DAE takes precedence on all acquisition matters after the Secretary and the Deputy Secretary.
- 3.4. The <u>Milestone Decision Authority</u> (MDA) is the designated individual with overall responsibility for a program. The MDA shall have the authority to approve entry of an acquisition program into the next phase of the acquisition process and shall be accountable for cost, schedule, and performance reporting to higher authority, including Congressional reporting.
- 3.5. The <u>Program Manager</u> (PM) is the designated individual with responsibility for and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs. The PM shall be accountable for credible cost, schedule, and performance reporting to the MDA.

4. POLICY

- 4.1. The Defense Acquisition System exists to manage the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces. The investment strategy of the Department of Defense shall be postured to support not only today's force, but also the next force, and future forces beyond that.
- 4.2. The primary objective of Defense acquisition is to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price.
 - 4.3. The following policies shall govern the Defense Acquisition System:
- 4.3.1. <u>Flexibility</u>. There is no <u>one</u> best way to structure an acquisition program to accomplish the objective of the Defense Acquisition System. MDAs and PMs shall tailor program strategies and oversight, including documentation of program information, acquisition phases, the timing and scope of decision reviews, and decision levels, to fit the particular conditions of that program, consistent with applicable laws and regulations and the timesensitivity of the capability need.
- 4.3.2. <u>Responsiveness</u>. Advanced technology shall be integrated into producible systems and deployed in the shortest time practicable. Approved, time-phased capability needs matched with available technology and resources enable evolutionary acquisition strategies. Evolutionary acquisition strategies are the preferred approach to satisfying operational needs. Spiral development is the preferred process for executing such strategies.
- 4.3.3. <u>Innovation</u>. Throughout the Department of Defense, acquisition professionals shall continuously develop and implement initiatives to streamline and improve the Defense

Acquisition System. MDAs and PMs shall examine and, as appropriate, adopt innovative practices (including best commercial practices and electronic business solutions) that reduce cycle time and cost, and encourage teamwork.

- 4.3.4. <u>Discipline</u>. PMs shall manage programs consistent with statute and the regulatory requirements specified in this Directive and in reference (b). Every PM shall establish program goals for the minimum number of cost, schedule, and performance parameters that describe the program over its life cycle. Approved program baseline parameters shall serve as control objectives. PMs shall identify deviations from approved acquisition program baseline parameters and exit criteria.
- 4.3.5. <u>Streamlined and Effective Management</u>. Responsibility for the acquisition of systems shall be decentralized to the maximum extent practicable. The MDA shall provide a single individual with sufficient authority to accomplish MDA-approved program objectives for development, production, and sustainment. The MDA shall ensure accountability and maximize credibility in cost, schedule, and performance reporting.
 - 4.4. Additional policies that will be applied to the acquisition system are at enclosure 1.

5. RESPONSIBILITIES

- 5.1. The USD(AT&L), the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), and the Director of Operational Test and Evaluation are key officials of the Defense Acquisition System. Consistent with their respective authorities, they may jointly issue DoD Instructions, DoD Publications, and one-time directive-type memoranda, consistent with DoD 5025.1-M (reference (c)), that implement the policies contained in this Directive. Financial Management Enterprise Architecture (FMEA) Requirements shall be addressed for all financial management and mixed (financial and non-financial) information systems and shall be certified as being compliant with the FMEA by the Under Secretary of Defense (Comptroller) (USD(C)).
- 5.2. The Chairman of the Joint Chiefs of Staff (CJCS) shall provide advice and assessment on military capability needs in accordance with sections 153, 163 and 181 of Title 10 (reference (d)). The CJCS shall present this advice and assessment through validated and approved capabilities documents. The CJCS may engage the components and agencies to provide this advice and assessment. Consistent with this Directive, and in coordination with the USD(AT&L), the CJCS may establish procedures to carry out this responsibility.

6. EFFECTIVE DATE

This Directive is effective immediately.

Paul Wolfowitz

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Deputy Secretary of Defense

ENCLOSURE 1

ADDITIONAL POLICY

- E1.1. <u>Armaments Cooperation</u>. PMs shall pursue international armaments cooperation to the maximum extent feasible, consistent with sound business practice and with the overall political, economic, technological, and national security goals of the United States. International agreements for international armaments cooperation programs shall complete the interagency consultation and Congressional notification requirements contained in 10 U.S.C. 2350a (reference (e)), section 2751 of the Arms Export Control Act (reference (f)), and 10 U.S.C. 2531 (reference (g)).
- E1.2. <u>Collaboration</u>. The DoD acquisition, capability needs, and financial communities, and operational users shall maintain continuous and effective communications with each other by using Integrated Product Teams (IPTs). Teaming among warfighters, users, developers, acquirers, technologists, testers, budgeters, and sustainers shall begin during capability needs definition. MDAs and PMs are responsible for making decisions and leading execution of their programs, and are accountable for results.
- E1.3. Competition. Competition shall provide major incentives to industry and Government organizations to innovate, reduce cost, and increase quality. All of the DoD Components shall acquire systems, subsystems, equipment, supplies, and services in accordance with the statutory requirements for competition. Acquisition managers shall take all necessary actions to promote a competitive environment, including the consideration of alternative systems to meet stated mission needs; structuring S&T investments and acquisition strategies to ensure the availability of competitive suppliers throughout a program's life, and for future programs; ensuring that prime contractors foster effective competition for major and critical products and technologies; and ensuring that qualified international sources are permitted to compete. If competition is not available, PMs shall consider alternatives that will yield the benefits of competition.
- E1.4. <u>Cost and Affordability</u>. All participants in the acquisition system shall recognize the reality of fiscal constraints. They shall view cost as an independent variable, and the DoD Components shall plan programs based on realistic projections of the dollars and manpower likely to be available in future years. To the greatest extent possible, the MDAs shall identify the total costs of ownership, and at a minimum, the major drivers of total ownership costs. The user shall address affordability in establishing capability needs.
- E1.5. <u>Cost Realism</u>. Contractors shall be encouraged to submit cost proposals that are realistic for the work to be performed. "Buy-ins" shall be discouraged because they may subvert competition or lead to poor contract performance or cost overruns. Proposals shall be evaluated for cost realism in accordance with the Federal Acquisition Regulation (reference (h)).
- E1.6. <u>Cost Sharing</u>. The PM shall structure the acquisition in a way that neither imposes undue risk on contractors, nor requires unusual contractor investment. Contractors shall not be encouraged nor required to invest their profit dollars or independent research and development funds to subsidize defense research and development contracts, except in unusual situations where there is a reasonable expectation of a potential commercial application. Contractors are entitled to earn reasonable rewards on DoD contracts, including competitively awarded contracts.

- E1.7. <u>Financial Management</u>. The USD(C) shall develop a FMEA and a transition plan in accordance with section 1004 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Pub. L. 107-314) (reference (i)) and shall approve any obligation of funds in excess of \$1M for a defense financial system improvement.
- E1.8. <u>Independent Operational Test Agency (OTA)</u>. Each Military Department shall establish an independent OTA, reporting directly to the Service Chief, to plan and conduct operational tests, report results, and provide evaluations of effectiveness and suitability.
- E1.9. <u>Information Assurance</u>. Acquisition managers shall address information assurance requirements for all weapon systems; Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance systems; and information technology programs that depend on external information sources or provide information to other DoD systems. DoD policy for information assurance of information technology, including NSS, appears in DoD Directive 8500.1, reference (j).
- E1.10. <u>Information Superiority</u>. Acquisition managers shall provide U.S. Forces with systems and families of systems that are secure, reliable, interoperable, compatible with the electromagnetic spectrum environment, and able to communicate across a universal information technology infrastructure, including NSS, consisting of data, information, processes, organizational interactions, skills, analytical expertise, other systems, networks, and information exchange capabilities.
- E1.11. <u>Integrated Test and Evaluation</u>. Test and evaluation shall be integrated throughout the defense acquisition process. Test and evaluation shall be structured to provide essential information to decision-makers, assess attainment of technical performance parameters, and determine whether systems are operationally effective, suitable, survivable, and safe for intended use. The conduct of test and evaluation, integrated with modeling and simulation, shall facilitate learning, assess technology maturity and interoperability, facilitate integration into fielded forces, and confirm performance against documented capability needs and adversary capabilities as described in the system threat assessment.
- E1.12. <u>Intelligence Support</u>. Intelligence and understanding threat capabilities are integral to system development and acquisition decisions. PMs shall keep threat capabilities current and validated in program documents throughout the acquisition process.
- E1.13. <u>Interoperability</u>. Systems, units, and forces shall be able to provide and accept data, information, materiel, and services to and from other systems, units, and forces and shall effectively interoperate with other U.S. Forces and coalition partners. Joint concepts and integrated architectures shall be used to characterize these interrelationships. DoD policy for the information technology, including NSS, aspects of interoperability and supportability appears in DoD Directive 4630.5, reference (k).
- E1.14. <u>Knowledge-Based Acquisition</u>. PMs shall provide knowledge about key aspects of a system at key points in the acquisition process. PMs shall reduce technology risk, demonstrate technologies in a relevant environment, and identify technology alternatives, prior to program initiation. They shall reduce integration risk and demonstrate product design prior to the design readiness review. They shall reduce manufacturing risk and demonstrate producibility prior to full-rate production.
- E1.15. <u>Legal Compliance</u>. The acquisition and procurement of DoD weapons and weapon systems shall be consistent with all applicable domestic law and treaties and international

- agreements (for arms control agreements, see DoD Directive 2060.1, reference (l)), customary international law, and the law of armed conflict (also known as the laws and customs of war). An attorney authorized to conduct such legal reviews in the Department shall conduct the legal review of the intended acquisition of weapons or weapons systems.
- E1.16. <u>Performance-Based Acquisition</u>. To maximize competition, innovation, and interoperability, and to enable greater flexibility in capitalizing on commercial technologies to reduce costs, acquisition managers shall consider and use performance-based strategies for acquiring and sustaining products and services whenever feasible. For products, this includes all new procurements and major modifications and upgrades, as well as reprocurements of systems, subsystems, and spares that are procured beyond the initial production contract award. When using performance-based strategies, contract requirements shall be stated in performance terms, limiting the use of military specifications and standards to Government-unique requirements only. Acquisition managers shall base configuration management decisions on factors that best support implementing performance-based strategies throughout the product life cycle.
- E1.17. <u>Performance-Based Logistics</u>. PMs shall develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint. Trade-off decisions involving cost, useful service, and effectiveness shall consider corrosion prevention and mitigation. Sustainment strategies shall include the best use of public and private sector capabilities through government/industry partnering initiatives, in accordance with statutory requirements.
- E1.18. <u>Products, Services, and Technologies</u>. The DoD Component(s) shall consider multiple concepts and analyze possible alternative ways to satisfy the user need. System concepts shall be founded in an operational context, consistent with the National Military Security Strategy, Defense Planning Guidance, Joint Concepts, and joint integrated architectures. The DoD Components shall seek the most cost-effective solution over the system's life cycle. They shall conduct market research and analysis to determine the availability, suitability, operational supportability, interoperability, safety, and ease of integration of the considered and selected procurement solutions. The DoD Components shall work with users to define capability needs that facilitate the following, listed in descending order of preference:
- E1.18.1. The procurement or modification of commercially available products, services, and technologies, from domestic or international sources, or the development of dual-use technologies;
- E1.18.2. The additional production or modification of previously-developed U.S. and/or Allied military systems or equipment;
 - E1.18.3. A cooperative development program with one or more Allied nations;
 - E1.18.4. A new, joint, DoD Component or Government Agency development program; or
 - E1.18.5. A new DoD Component-unique development program.
- E1.19. <u>Professional Workforce</u>. The Department of Defense shall maintain a fully proficient acquisition, technology, and logistics workforce that is flexible and highly skilled across a range of management, technical, and business disciplines. To ensure this, the USD(AT&L) shall establish education, training, and experience standards for each acquisition position based on the level of complexity of duties carried out in that position.

- E1.20. <u>Program Information</u>. Complete and current program information is essential to the acquisition process. Consistent with the tables of required regulatory and statutory information appearing in reference (b), decision authorities shall require PMs and other participants in the defense acquisition process to present only the minimum information necessary to establish the program baseline, describe program plans, understand program status, and make informed decisions. The MDA shall "tailor-in" program information. IPTs shall facilitate the management and exchange of program information.
- E1.21. <u>Program Stability</u>. The DoD Components shall develop realistic program schedules, long-range investment plans, and affordability assessments, and shall strive to ensure stable program funding. The MDA shall determine the appropriate point at which to fully fund an acquisition program, generally when a system concept and design have been selected, a PM has been assigned, capability needs have been approved, and system-level development is ready to begin. Full funding shall be based on the cost of the most likely system alternative.
- E1.22. <u>Research and Technology Protection</u>. Acquisition managers shall identify classified and controlled unclassified research and technology information requiring additional counter intelligence and security support early in the research and development, capability needs generation, and acquisition processes.
- E1.23. <u>Safety</u>. Safety shall be addressed throughout the acquisition process. Safety considerations include human (includes human/system interfaces), toxic/hazardous materials and substances, production/manufacturing, testing, facilities, logistical support, weapons, and munitions/explosives. All systems containing energetics shall comply with insensitive munitions criteria.
- E1.24. <u>Small Business Participation</u>. Acquisition strategies shall be structured to facilitate small business participation throughout a program's life cycle through direct participation or, where such participation is not available, through fostering teaming with small business concerns.
- E1.25. <u>Software Intensive Systems</u>. Acquisition of software intensive systems shall use process improvement and performance measures. Selection of sources shall include consideration of product maturity and past performance.
- E1.26. <u>Streamlined Organizations</u>. The Department of Defense shall use a streamlined management structure in the acquisition system, characterized by short, clearly defined lines of responsibility, authority, and accountability. In no case, shall there be more than two levels of review between a PM and the MDA.
- E1.27. Systems Engineering. Acquisition programs shall be managed through the application of a systems engineering approach that optimizes total system performance and minimizes total ownership costs. A modular, open-systems approach shall be employed, where feasible.
- E1.28. <u>Technology Development and Transition</u>. The Science and Technology (S&T) program shall:
 - E1.28.1. Address user needs;
- E1.28.2. Maintain a broad-based program spanning all Defense-relevant sciences and technologies to anticipate future needs and those not being pursued by civil or commercial communities;

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E1.28.3. Preserve long-range research; and

- E1.28.4. Enable rapid, successful transition from the S&T base to useful military products.
- E1.29. <u>Total Systems Approach</u>. The PM shall be the single point of accountability for accomplishing program objectives for total life-cycle systems management, including sustainment. The PM shall apply human systems integration to optimize total system performance (hardware, software, and human), operational effectiveness, and suitability, survivability, safety, and affordability. PMs shall consider supportability, life cycle costs, performance, and schedule comparable in making program decisions. Planning for Operation and Support and the estimation of total ownership costs shall begin as early as possible. Supportability, a key component of performance, shall be considered throughout the system life cycle.

ENCLOSURE 1

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